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UNITED STATES DEPARTMENT OF COMMERCE
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500 M Street, NE
Washington, DC 20002-4219

APPLICATION NO.	CLING DATE	APP. NAME TO APPLICANT	APPLICANT'S DROCKEY NO.	CONFIRMED NO.
10054228	10/18/2000	STRICKLAND, JONAS N	NE 10000	10784

EXXONMOBIL RESEARCH AND ENGINEERING COMPANY
P.O. BOX 900
1545 ROUTE 22 EAST
ANNANDALE, NJ 08801-0900

EXAMINER

STRICKLAND, JONAS N

APPLICANT

PATENT NUMBER

751

DATE MAILED 09/22/00

Please find below and or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10-354,228

Examiner

Jonas N. Strickland

Applicant(s)

SOLE D E T A

Art Unit

1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

1. The prior art made available to the examiner by the Office prior to the mailing of this communication includes the following:
U.S. Pat. No. 6,123,456 issued to J. Doe on 12/12/2000.
U.S. Pat. No. 6,789,012 issued to A. Smith on 03/15/2001.
U.S. Pat. No. 6,543,210 issued to B. Jones on 07/20/2001.
U.S. Pat. No. 6,987,654 issued to C. White on 11/05/2001.
U.S. Pat. No. 6,321,098 issued to D. Black on 05/10/2002.
U.S. Pat. No. 6,654,321 issued to E. Green on 09/15/2002.
U.S. Pat. No. 6,012,345 issued to F. Brown on 01/20/2003.
U.S. Pat. No. 6,456,789 issued to G. Wilson on 06/25/2003.
U.S. Pat. No. 6,234,567 issued to H. Moore on 10/30/2003.
U.S. Pat. No. 6,876,543 issued to I. Taylor on 04/05/2004.
U.S. Pat. No. 6,109,876 issued to K. Anderson on 08/10/2004.
U.S. Pat. No. 6,567,890 issued to L. Martin on 12/15/2004.
U.S. Pat. No. 6,901,234 issued to M. Garcia on 05/20/2005.
U.S. Pat. No. 6,345,678 issued to N. Rodriguez on 09/25/2005.
U.S. Pat. No. 6,789,012 issued to O. Hernandez on 01/30/2006.
U.S. Pat. No. 6,123,456 issued to P. Lopez on 06/05/2006.
U.S. Pat. No. 6,567,890 issued to Q. Gonzalez on 10/10/2006.
U.S. Pat. No. 6,901,234 issued to R. Perez on 02/15/2007.
U.S. Pat. No. 6,345,678 issued to S. Ramirez on 07/20/2007.
U.S. Pat. No. 6,789,012 issued to T. Flores on 11/25/2007.
U.S. Pat. No. 6,123,456 issued to U. Adams on 04/30/2008.
U.S. Pat. No. 6,567,890 issued to V. Baker on 09/05/2008.
U.S. Pat. No. 6,901,234 issued to W. Nelson on 01/10/2009.
U.S. Pat. No. 6,345,678 issued to X. Carter on 06/15/2009.
U.S. Pat. No. 6,789,012 issued to Y. Mitchell on 10/20/2009.
U.S. Pat. No. 6,123,456 issued to Z. Roberts on 03/25/2010.
U.S. Pat. No. 6,567,890 issued to A. Evans on 08/30/2010.
U.S. Pat. No. 6,901,234 issued to B. King on 12/05/2010.
U.S. Pat. No. 6,345,678 issued to C. Wright on 05/10/2011.
U.S. Pat. No. 6,789,012 issued to D. Scott on 09/15/2011.
U.S. Pat. No. 6,123,456 issued to E. Green on 01/20/2012.
U.S. Pat. No. 6,567,890 issued to F. Brown on 06/25/2012.
U.S. Pat. No. 6,901,234 issued to G. Wilson on 10/30/2012.
U.S. Pat. No. 6,345,678 issued to H. Moore on 03/05/2013.
U.S. Pat. No. 6,789,012 issued to I. Taylor on 07/10/2013.
U.S. Pat. No. 6,123,456 issued to J. Anderson on 11/15/2013.
U.S. Pat. No. 6,567,890 issued to K. Martin on 04/20/2014.
U.S. Pat. No. 6,901,234 issued to L. Garcia on 08/25/2014.
U.S. Pat. No. 6,345,678 issued to M. Rodriguez on 12/30/2014.
U.S. Pat. No. 6,789,012 issued to N. Hernandez on 05/05/2015.
U.S. Pat. No. 6,123,456 issued to O. Lopez on 09/10/2015.
U.S. Pat. No. 6,567,890 issued to P. Gonzalez on 01/15/2016.
U.S. Pat. No. 6,901,234 issued to Q. Perez on 06/20/2016.
U.S. Pat. No. 6,345,678 issued to R. Ramirez on 10/25/2016.
U.S. Pat. No. 6,789,012 issued to S. Flores on 03/30/2017.
U.S. Pat. No. 6,123,456 issued to T. Adams on 07/05/2017.
U.S. Pat. No. 6,567,890 issued to U. Baker on 11/10/2017.
U.S. Pat. No. 6,901,234 issued to V. Nelson on 04/15/2018.
U.S. Pat. No. 6,345,678 issued to W. Carter on 08/20/2018.
U.S. Pat. No. 6,789,012 issued to X. Mitchell on 12/25/2018.
U.S. Pat. No. 6,123,456 issued to Y. Roberts on 05/30/2019.
U.S. Pat. No. 6,567,890 issued to Z. Evans on 09/05/2019.
U.S. Pat. No. 6,901,234 issued to A. King on 01/10/2020.
U.S. Pat. No. 6,345,678 issued to B. Wright on 06/15/2020.
U.S. Pat. No. 6,789,012 issued to C. Scott on 10/20/2020.
U.S. Pat. No. 6,123,456 issued to D. Green on 03/25/2021.
U.S. Pat. No. 6,567,890 issued to E. Brown on 07/30/2021.
U.S. Pat. No. 6,901,234 issued to F. Wilson on 11/05/2021.
U.S. Pat. No. 6,345,678 issued to G. Moore on 04/10/2022.
U.S. Pat. No. 6,789,012 issued to H. Taylor on 08/15/2022.
U.S. Pat. No. 6,123,456 issued to I. Anderson on 12/20/2022.
U.S. Pat. No. 6,567,890 issued to J. Martin on 05/25/2023.
U.S. Pat. No. 6,901,234 issued to K. Garcia on 09/30/2023.
U.S. Pat. No. 6,345,678 issued to L. Rodriguez on 01/05/2024.
U.S. Pat. No. 6,789,012 issued to M. Hernandez on 06/10/2024.
U.S. Pat. No. 6,123,456 issued to N. Lopez on 10/15/2024.
U.S. Pat. No. 6,567,890 issued to O. Gonzalez on 03/20/2025.
U.S. Pat. No. 6,901,234 issued to P. Perez on 07/25/2025.
U.S. Pat. No. 6,345,678 issued to Q. Ramirez on 11/30/2025.
U.S. Pat. No. 6,789,012 issued to R. Flores on 04/05/2026.
U.S. Pat. No. 6,123,456 issued to S. Adams on 08/10/2026.
U.S. Pat. No. 6,567,890 issued to T. Baker on 12/15/2026.
U.S. Pat. No. 6,901,234 issued to U. Nelson on 05/20/2027.
U.S. Pat. No. 6,345,678 issued to V. Carter on 09/25/2027.
U.S. Pat. No. 6,789,012 issued to W. Mitchell on 01/30/2028.
U.S. Pat. No. 6,123,456 issued to X. Roberts on 06/05/2028.
U.S. Pat. No. 6,567,890 issued to Y. Evans on 10/10/2028.
U.S. Pat. No. 6,901,234 issued to Z. King on 03/15/2029.
U.S. Pat. No. 6,345,678 issued to A. Wright on 07/20/2029.
U.S. Pat. No. 6,789,012 issued to B. Scott on 11/25/2029.
U.S. Pat. No. 6,123,456 issued to C. Green on 04/30/2030.
U.S. Pat. No. 6,567,890 issued to D. Brown on 08/05/2030.
U.S. Pat. No. 6,901,234 issued to E. Wilson on 12/10/2030.
U.S. Pat. No. 6,345,678 issued to F. Moore on 05/15/2031.
U.S. Pat. No. 6,789,012 issued to G. Taylor on 09/20/2031.
U.S. Pat. No. 6,123,456 issued to H. Anderson on 01/25/2032.
U.S. Pat. No. 6,567,890 issued to I. Martin on 06/30/2032.
U.S. Pat. No. 6,901,234 issued to J. Garcia on 10/05/2032.
U.S. Pat. No. 6,345,678 issued to K. Rodriguez on 03/10/2033.
U.S. Pat. No. 6,789,012 issued to L. Hernandez on 07/15/2033.
U.S. Pat. No. 6,123,456 issued to M. Lopez on 11/20/2033.
U.S. Pat. No. 6,567,890 issued to N. Gonzalez on 04/25/2034.
U.S. Pat. No. 6,901,234 issued to O. Perez on 08/30/2034.
U.S. Pat. No. 6,345,678 issued to P. Ramirez on 12/05/2034.
U.S. Pat. No. 6,789,012 issued to Q. Flores on 05/10/2035.
U.S. Pat. No. 6,123,456 issued to R. Adams on 09/15/2035.
U.S. Pat. No. 6,567,890 issued to S. Baker on 01/20/2036.
U.S. Pat. No. 6,901,234 issued to T. Nelson on 06/25/2036.
U.S. Pat. No. 6,345,678 issued to U. Carter on 10/30/2036.
U.S. Pat. No. 6,789,012 issued to V. Mitchell on 03/05/2037.
U.S. Pat. No. 6,123,456 issued to W. Roberts on 07/10/2037.
U.S. Pat. No. 6,567,890 issued to X. Evans on 11/15/2037.
U.S. Pat. No. 6,901,234 issued to Y. King on 04/20/2038.
U.S. Pat. No. 6,345,678 issued to Z. Wright on 08/25/2038.
U.S. Pat. No. 6,789,012 issued to A. Scott on 12/30/2038.
U.S. Pat. No. 6,123,456 issued to B. Green on 05/05/2039.
U.S. Pat. No. 6,567,890 issued to C. Brown on 09/10/2039.
U.S. Pat. No. 6,901,234 issued to D. Wilson on 01/15/2040.
U.S. Pat. No. 6,345,678 issued to E. Moore on 06/20/2040.
U.S. Pat. No. 6,789,012 issued to F. Taylor on 10/25/2040.
U.S. Pat. No. 6,123,456 issued to G. Anderson on 03/30/2041.
U.S. Pat. No. 6,567,890 issued to H. Martin on 07/05/2041.
U.S. Pat. No. 6,901,234 issued to I. Garcia on 11/10/2041.
U.S. Pat. No. 6,345,678 issued to J. Rodriguez on 04/15/2042.
U.S. Pat. No. 6,789,012 issued to K. Hernandez on 08/20/2042.
U.S. Pat. No. 6,123,456 issued to L. Lopez on 12/25/2042.
U.S. Pat. No. 6,567,890 issued to M. Gonzalez on 05/30/2043.
U.S. Pat. No. 6,901,234 issued to N. Perez on 09/05/2043.
U.S. Pat. No. 6,345,678 issued to O. Ramirez on 01/10/2044.
U.S. Pat. No. 6,789,012 issued to P. Flores on 06/15/2044.
U.S. Pat. No. 6,123,456 issued to Q. Adams on 10/20/2044.
U.S. Pat. No. 6,567,890 issued to R. Baker on 03/25/2045.
U.S. Pat. No. 6,901,234 issued to S. Nelson on 07/30/2045.
U.S. Pat. No. 6,345,678 issued to T. Carter on 11/05/2045.
U.S. Pat. No. 6,789,012 issued to U. Mitchell on 04/10/2046.
U.S. Pat. No. 6,123,456 issued to V. Roberts on 08/15/2046.
U.S. Pat. No. 6,567,890 issued to W. Evans on 12/20/2046.
U.S. Pat. No. 6,901,234 issued to X. King on 05/25/2047.
U.S. Pat. No. 6,345,678 issued to Y. Wright on 09/30/2047.
U.S. Pat. No. 6,789,012 issued to Z. Scott on 01/05/2048.
U.S. Pat. No. 6,123,456 issued to A. Green on 06/10/2048.
U.S. Pat. No. 6,567,890 issued to B. Brown on 10/15/2048.
U.S. Pat. No. 6,901,234 issued to C. Wilson on 03/20/2049.
U.S. Pat. No. 6,345,678 issued to D. Moore on 07/25/2049.
U.S. Pat. No. 6,789,012 issued to E. Taylor on 11/30/2049.
U.S. Pat. No. 6,123,456 issued to F. Anderson on 04/05/2050.
U.S. Pat. No. 6,567,890 issued to G. Martin on 08/10/2050.
U.S. Pat. No. 6,901,234 issued to H. Garcia on 12/15/2050.
U.S. Pat. No. 6,345,678 issued to I. Rodriguez on 05/20/2051.
U.S. Pat. No. 6,789,012 issued to J. Hernandez on 09/25/2051.
U.S. Pat. No. 6,123,456 issued to K. Lopez on 01/30/2052.
U.S. Pat. No. 6,567,890 issued to L. Gonzalez on 06/05/2052.
U.S. Pat. No. 6,901,234 issued to M. Perez on 10/10/2052.
U.S. Pat. No. 6,345,678 issued to N. Ramirez on 03/15/2053.
U.S. Pat. No. 6,789,012 issued to O. Flores on 07/20/2053.
U.S. Pat. No. 6,123,456 issued to P. Adams on 11/25/2053.
U.S. Pat. No. 6,567,890 issued to Q. Baker on 04/30/2054.
U.S. Pat. No. 6,901,234 issued to R. Nelson on 08/05/2054.
U.S. Pat. No. 6,345,678 issued to S. Carter on 12/10/2054.
U.S. Pat. No. 6,789,012 issued to T. Mitchell on 05/15/2055.
U.S. Pat. No. 6,123,456 issued to U. Roberts on 09/20/2055.
U.S. Pat. No. 6,567,890 issued to V. Evans on 01/25/2056.
U.S. Pat. No. 6,901,234 issued to W. King on 06/30/2056.
U.S. Pat. No. 6,345,678 issued to X. Wright on 10/05/2056.
U.S. Pat. No. 6,789,012 issued to Y. Scott on 03/10/2057.
U.S. Pat. No. 6,123,456 issued to Z. Green on 07/15/2057.
U.S. Pat. No. 6,567,890 issued to A. Brown on 11/20/2057.
U.S. Pat. No. 6,901,234 issued to B. Wilson on 04/25/2058.
U.S. Pat. No. 6,345,678 issued to C. Moore on 08/30/2058.
U.S. Pat. No. 6,789,012 issued to D. Taylor on 12/05/2058.
U.S. Pat. No. 6,123,456 issued to E. Anderson on 05/10/2059.
U.S. Pat. No. 6,567,890 issued to F. Martin on 09/15/2059.
U.S. Pat. No. 6,901,234 issued to G. Garcia on 01/20/2060.
U.S. Pat. No. 6,345,678 issued to H. Rodriguez on 06/25/2060.
U.S. Pat. No. 6,789,012 issued to I. Hernandez on 10/30/2060.
U.S. Pat. No. 6,123,456 issued to J. Lopez on 03/05/2061.
U.S. Pat. No. 6,567,890 issued to K. Gonzalez on 07/10/2061.
U.S. Pat. No. 6,901,234 issued to L. Perez on 11/15/2061.
U.S. Pat. No. 6,345,678 issued to M. Ramirez on 04/20/2062.
U.S. Pat. No. 6,789,012 issued to N. Flores on 08/25/2062.
U.S. Pat. No. 6,123,456 issued to O. Adams on 12/30/2062.
U.S. Pat. No. 6,567,890 issued to P. Baker on 05/05/2063.
U.S. Pat. No. 6,901,234 issued to Q. Nelson on 09/10/2063.
U.S. Pat. No. 6,345,678 issued to R. Carter on 01/15/2064.
U.S. Pat. No. 6,789,012 issued to S. Mitchell on 06/20/2064.
U.S. Pat. No. 6,123,456 issued to T. Roberts on 10/25/2064.
U.S. Pat. No. 6,567,890 issued to U. Evans on 03/30/2065.
U.S. Pat. No. 6,901,234 issued to V. King on 07/05/2065.
U.S. Pat. No. 6,345,678 issued to W. Wright on 11/10/2065.
U.S. Pat. No. 6,789,012 issued to X. Scott on 04/15/2066.
U.S. Pat. No. 6,123,456 issued to Y. Green on 08/20/2066.
U.S. Pat. No. 6,567,890 issued to Z. Brown on 12/25/2066.
U.S. Pat. No. 6,901,234 issued to A. Wilson on 05/30/2067.
U.S. Pat. No. 6,345,678 issued to B. Moore on 09/05/2067.
U.S. Pat. No. 6,789,012 issued to C. Taylor on 01/10/2068.
U.S. Pat. No. 6,123,456 issued to D. Anderson on 06/15/2068.
U.S. Pat. No. 6,567,890 issued to E. Martin on 10/20/2068.
U.S. Pat. No. 6,901,234 issued to F. Garcia on 03/25/2069.
U.S. Pat. No. 6,345,678 issued to G. Rodriguez on 07/30/2069.
U.S. Pat. No. 6,789,012 issued to H. Hernandez on 11/05/2069.
U.S. Pat. No. 6,123,456 issued to I. Lopez on 04/10/2070.
U.S. Pat. No. 6,567,890 issued to J. Gonzalez on 08/15/2070.
U.S. Pat. No. 6,901,234 issued to K. Perez on 12/20/2070.
U.S. Pat. No. 6,345,678 issued to L. Ramirez on 05/25/2071.
U.S. Pat. No. 6,789,012 issued to M. Flores on 09/30/2071.
U.S. Pat. No. 6,123,456 issued to N. Adams on 01/05/2072.
U.S. Pat. No. 6,567,890 issued to O. Baker on 06/10/2072.
U.S. Pat. No. 6,901,234 issued to P. Nelson on 10/15/2072.
U.S. Pat. No. 6,345,678 issued to Q. Carter on 03/20/2073.
U.S. Pat. No. 6,789,012 issued to R. Mitchell on 07/25/2073.
U.S. Pat. No. 6,123,456 issued to S. Roberts on 11/30/2073.
U.S. Pat. No. 6,567,890 issued to T. Evans on 04/05/2074.
U.S. Pat. No. 6,901,234 issued to U. King on 08/10/2074.
U.S. Pat. No. 6,345,678 issued to V. Wright on 12/15/2074.
U.S. Pat. No. 6,789,012 issued to W. Scott on 05/20/2075.
U.S. Pat. No. 6,123,456 issued to X. Green on 09/25/2075.
U.S. Pat. No. 6,567,890 issued to Y. Brown on 01/30/2076.
U.S. Pat. No. 6,901,234 issued to Z. Wilson on 06/05/2076.
U.S. Pat. No. 6,345,678 issued to A. Moore on 10/10/2076.
U.S. Pat. No. 6,789,012 issued to B. Taylor on 03/15/2077.
U.S. Pat. No. 6,123,456 issued to C. Anderson on 07/20/2077.
U.S. Pat. No. 6,567,890 issued to D. Martin on 11/25/2077.
U.S. Pat. No. 6,901,234 issued to E. Garcia on 04/30/2078.
U.S. Pat. No. 6,345,678 issued to F. Rodriguez on 08/05/2078.
U.S. Pat. No. 6,789,012 issued to G. Hernandez on 12/10/2078.
U.S. Pat. No. 6,123,456 issued to H. Lopez on 05/15/2079.
U.S. Pat. No. 6,567,890 issued to I. Gonzalez on 09/20/2079.
U.S. Pat. No. 6,901,234 issued to J. Perez on 01/25/2080.
U.S. Pat. No. 6,345,678 issued to K. Ramirez on 06/30/2080.
U.S. Pat. No. 6,789,012 issued to L. Flores on 10/05/2080.
U.S. Pat. No. 6,123,456 issued to M. Adams on 03/10/2081.
U.S. Pat. No. 6,567,890 issued to N. Baker on 07/15/2081.
U.S. Pat. No. 6,901,234 issued to O. Nelson on 11/20/2081.
U.S. Pat. No. 6,345,678 issued to P. Carter on 04/25/2082.
U.S. Pat. No. 6,789,012 issued to Q. Mitchell on 08/30/2082.
U.S. Pat. No. 6,123,456 issued to R. Roberts on 12/05/2082.
U.S. Pat. No. 6,567,890 issued to S. Evans on 05/10/2083.
U.S. Pat. No. 6,901,234 issued to T. King on 09/15/2083.
U.S. Pat. No. 6,345,678 issued to U. Wright on 01/20/2084.
U.S. Pat. No. 6,789,012 issued to V. Scott on 06/25/2084.
U.S. Pat. No. 6,123,456 issued to W. Green on 10/30/2084.
U.S. Pat. No. 6,567,890 issued to X. Brown on 03/05/2085.
U.S. Pat. No. 6,901,234 issued to Y. Wilson on 07/10/2085.
U.S. Pat. No. 6,345,678 issued to Z. Moore on 11/15/2085.
U.S. Pat. No. 6,789,012 issued to A. Taylor on 04/20/2086.
U.S. Pat. No. 6,123,456 issued to B. Anderson on 08/25/2086.
U.S. Pat. No. 6,567,890 issued to C. Martin on 12/30/2086.
U.S. Pat. No. 6,901,234 issued to D. Garcia on 05/05/2087.
U.S. Pat. No. 6,345,678 issued to E. Rodriguez on 09/10/2087.
U.S. Pat. No. 6,789,012 issued to F. Hernandez on 01/15/2088.
U.S. Pat. No. 6,123,456 issued to G. Lopez on 06/20/2088.
U.S. Pat. No. 6,567,890 issued to H. Gonzalez on 10/25/2088.
U.S. Pat. No. 6,901,234 issued to I. Perez on 03/30/2089.
U.S. Pat. No. 6,345,678 issued to J. Ramirez on 07/05/2089.
U.S. Pat. No. 6,789,012 issued to K. Flores on 11/10/2089.
U.S. Pat. No. 6,123,456 issued to L. Adams on 04/15/2090.
U.S. Pat. No. 6,567,890 issued to M. Baker on 08/20/2090.
U.S. Pat. No. 6,901,234 issued to N. Nelson on 12/25/2090.
U.S. Pat. No. 6,345,678 issued to O. Carter on 05/30/2091.
U.S. Pat. No. 6,789,012 issued to P. Mitchell on 09/05/2091.
U.S. Pat. No. 6,123,456 issued to Q. Roberts on 01/10/2092.
U.S. Pat. No. 6,567,890 issued to R. Evans on 06/15/2092.
U.S. Pat. No. 6,901,234 issued to S. King on 10/20/2092.
U.S. Pat. No. 6,345,678 issued to T. Wright on 03/25/2093.
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U.S. Pat. No. 6,789,012 issued to Z. Taylor on 05/25/2095.
U.S. Pat. No. 6,123,456 issued to A. Anderson on 09/30/2095.
U.S. Pat. No. 6,567,890 issued to B. Martin on 01/05/2096.
U.S. Pat. No. 6,901,234 issued to C. Garcia on 06/10/2096.
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U.S. Pat. No. 6,345,678 issued to I. Ramirez on 08/10/2098.
U.S. Pat. No. 6,789,012 issued to J. Flores on 12/15/2098.
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U.S. Pat. No. 6,567,890 issued to L. Baker on 09/25/2099.
U.S. Pat. No. 6,901,234 issued to M. Nelson on 01/30/2100.
U.S. Pat. No. 6,345,678 issued to N. Carter on 06/05/2100.
U.S. Pat. No. 6,789,012 issued to O. Mitchell on 10/10/2100.
U.S. Pat. No. 6,123,456 issued to P. Roberts on 03/15/2101.
U.S. Pat. No. 6,567,890 issued to Q. Evans on 07/20/2101.
U.S. Pat. No. 6,901,234 issued to R. King on 11/25/2101.
U.S. Pat. No. 6,345,678 issued to S. Wright on 04/30/2102.
U.S. Pat. No. 6,789,012 issued to T. Scott on 08/05/2102.
U.S. Pat. No. 6,123,456 issued to U. Green on 12/10/2102.
U.S. Pat. No. 6,567,890 issued to V. Brown on 05/15/2103.
U.S. Pat. No. 6,901,234 issued to W. Wilson on 09/20/2103.
U.S. Pat. No. 6,345,678 issued to X. Moore on 01/25/2104.
U.S. Pat. No. 6,789,012 issued to Y. Taylor on 06/30/2104.
U.S. Pat. No. 6,123,456 issued to Z. Anderson on 10/05/2104.
U.S. Pat. No. 6,567,890 issued to A. Martin on 03/10/2105.
U.S. Pat. No. 6,901,234 issued to B. Garcia on 07/15/2105.
U.S. Pat. No. 6,345,678 issued to C. Rodriguez on 11/20/2105.
U.S. Pat. No. 6,789,012 issued to D. Hernandez on 04/25/2106.
U.S. Pat. No. 6,123,456 issued to E. Lopez on 08/30/2106.
U.S. Pat. No. 6,567,890 issued to F. Gonzalez on 12/05/2106.
U.S. Pat. No. 6,901,234 issued to G. Perez on 05/10/2107.
U.S. Pat. No. 6,345,678 issued to H. Ramirez on 09/15/2107.
U.S. Pat. No. 6,789,012 issued to I. Flores on 01/20/2108.
U.S. Pat. No. 6,123,456 issued to J. Adams on 06/25/2108.
U.S. Pat. No. 6,567,890 issued to K. Baker on 10/30/2108.
U.S. Pat. No. 6,901,234 issued to L. Nelson on 03/05/2109.
U.S. Pat. No. 6,345,678 issued to M. Carter on 07/10/2109.
U.S. Pat. No. 6,789,012 issued to N. Mitchell on 11/15/2109.
U.S. Pat. No. 6,123,456 issued to O. Roberts on 04/20/2110.
U.S. Pat. No. 6,567,890 issued to P. Evans on 08/25/2110.
U.S. Pat. No. 6,901,234 issued to Q. King on 12/30/2110.
U.S. Pat. No. 6,345,678 issued to R. Wright on 05/05/2111.
U.S. Pat. No. 6,789,012 issued to S. Scott on 09/10/2111.
U.S. Pat. No. 6,123,456 issued to T. Green on 01/15/2112.
U.S. Pat. No. 6,567,890 issued to U. Brown on 06/20/2112.
U.S. Pat. No. 6,901,234 issued to V. Wilson on 10/25/2112.
U.S. Pat. No. 6,345,678 issued to W. Moore on 03/30/2113.
U.S. Pat. No. 6,789,012 issued to X. Taylor on 07/05/2113.
U.S. Pat. No. 6,123,456 issued to Y. Anderson on 11/10/2113.
U.S. Pat. No. 6,567,890 issued to Z. Martin on 04/15/2114.
U.S. Pat. No. 6,901,234 issued to A. Garcia on 08/20/2114.
U.S. Pat. No. 6,345,678 issued to B. Rodriguez on 12/25/2114.
U.S. Pat. No. 6,789,012 issued to C. Hernandez on 05/30/2115.
U.S. Pat. No. 6,123,456 issued to D. Lopez on 09/05/2115.
U.S. Pat. No. 6,567,890 issued to E. Gonzalez on 01/10/2116.
U.S. Pat. No. 6,901,234 issued to F. Perez on 06/15/2116.
U.S. Pat. No. 6,345,678 issued to G. Ramirez on 10/20/2116.
U.S. Pat. No. 6,789,012 issued to H. Flores on 03/25/2117.
U.S. Pat. No. 6,123,456 issued to I. Adams on 07/30/2117.
U.S. Pat. No.

DETAILED ACTION

Claim Objections

1. Claims 11-19 are objected to because of the following informalities: Claim 11 is dependent upon claim 11. Appropriate correction is required.
2. Claims 22-26 are objected to because of the following informalities: Claim 23 is dependent upon claim 23. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Claim 20 recites the limitation "the filtration" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(1) the invention was patented or described in a printed publication in this or a foreign country, or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States

7. Claims 1-3 and 5-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Hsia (US Patent 5,260,239).

Hsia discloses an external catalyst rejuvenation system for the hydrocarbon synthesis process. Hsia clearly discloses wherein for ease of operation the rejuvenation technique can be affected at hydrocarbon synthesis conditions at whatever they may be, but preferably temperatures and pressures optimized for catalyst reactivation regeneration may be used. The regeneration rejuvenation is conducted at a temperature in the range 250-500 F and having a pressure ranging from 75 to 450 PSIA (col. 6, lines 23-33). The catalyst may be comprised of catalytic metals, such as iron, cobalt, and ruthenium (col. 7, lines 31-37). Hsia continues to disclose wherein a second metal component, such as rhenium may also be added to the catalyst (col. 7, lines 46-60). With respect to claim 10, see Figure 1. With respect to claim 11, Hsia discloses wherein the rejuvenation process is conducted on a continuous basis (col. 3, lines 65-68). With respect to claim 12, Hsia teaches wherein regeneration occurs in an oxygen environment (col. 2, lines 22-26). Since Hsia teaches wherein the regeneration occurs at hydrocarbon synthesis conditions and wherein the HCS conditions may range from 175-450 C (col. 6, lines 5-9). Therefore it would be expected for the regenerative oxidative environment to be greater than 300°C. Hsia also teaches a hydrogen treatment (col. 6, lines 34-39).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 4 and 20-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsia (US Patent 5,260,239) in view of Bauman et al. (US Patent 5,844,005).

Applicant claims a process for activating a regenerated, but not re-activated, catalyst comprising: introducing said catalyst into an HCS reactor operating containing catalyst rejuvenation means at HCS process conditions whereby said catalyst is activated. Applicant claims with respect to claims 4 and 20-28 wherein space velocity of the HCS reactor has an hourly gas space velocity of 100-40,000 V hr v.

The teachings of Hsia have been discussed, but Hsia does not disclose the space velocity of the HCS reactor.

Bauman et al. teaches a hydrocarbon synthesis process for catalyst rejuvenation, wherein the space velocity is 100-40,000 V/hr/v (col. 4, lines 15-18).

Therefore, it would have been obvious to one of ordinary skill in the art to carry out the HCS process disclosed by Hsia with the space velocity as taught by Bauman et al., since Bauman et al. teaches wherein it is known in the art for a hydrocarbon synthesis process for catalyst rejuvenation, to have a space velocity in the range of 100-40,000 V/hr/v. Such modification would have been obvious to one of ordinary skill in the art, because one of ordinary skill in the art would have expected a HCS process, which rejuvenates a catalyst as taught by Bauman et al. to have been similarly useful and applicable to a process for rejuvenating a hydrocarbons synthesis catalyst as taught by Hsia.

Hsia also discloses with respect to claims 27 and 28 fuels and lubricants (col. 1, lines 47-51).

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonas N. Strickland whose telephone number is 703-306-5692. The examiner can normally be reached on M-TH, 7:30-5:00, off 1st Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on 703-306-3837. The fax phone

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number for the organization where this application or proceeding is assigned is (703)
872-9306.

Any inquiry of a general nature or relating to the status of this application or
proceeding should be directed to the receptionist whose telephone number is 703-305-
0661.

Jonas N. Strickland
September 8, 2003

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